HT-02-026

November 18, 2003

Commissioner for Patents

P.O.Box 1450

Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572

28 Davis Avenue

Poughkeepsie, N.Y. 12603

Subject:

Serial No. 10/647,718 08/25/03

Yimin Guo

MAGNETIC MEMORY WITH SELF-ALIGNED MAGNETIC KEEPER STRUCTURE

Grp. Art Unit:

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation In An Application.

The following Patents and/or Publications are submitted to comply with the duty of disclosure under CFR 1.97-1.99 and 37 CFR 1.56. Copies of each document is included herewith.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on November ?), 2003.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

1

HT-02-026

- U.S. Patent Application Publication US 2002/0055190 A1 to Anthony, "Magnetic Memory With Structures that Prevent Disruptions to Magnetization in Sense Layer, provides a keeper structure which is a soft magnetic material surrounding a current carrying conductor beneath the sense layer.
- U.S. Patent 6,358,757 to Anthony, "Method for Forming Magnetic Memory With Structures that Prevent Disruptions to Magnetization in Sense Layers, provides a method for forming an array of MRAM devices at the intersections of orthogonally crossing upper and lower conductors in which the lower conductors are surrounded by soft magnetic keeper layers.
- U.S. Patent 6,413,788 to Tuttle, "Keepers for MRAM Electrodes, " within a variety of embodiments, teaches methods for forming keeper structures around both upper and lower condutors in damascene type trench configurations.
- U.S. Patent 6,417,561 to Tuttle, "Keepers for MRAM Electrodes, " discloses a magnetic memory device and method wherein a bit region sensitive to magnetic fields and preferably comprising a tunneling magnetoresistance (TMR) structure is located between a top electrode with a magnetic keeper and a bottom electrode with a magnetic keeper.

Sincerely

Stephen B. Ackerman, Reg. #37761

1091

INFO	RMA							OSURE C	HOITATION	HT-02-02	Gu	10/647	· · · · · · · · · · · · · · · · · · ·	
								CATION	•	FHING Date		Oroup Art Unit		
	(Us	0 30	707	ol s	hou	ts if	ne	cossary)	U 0' D 1 7 E	08/25/0	3	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	· ~	
CY LINE D	<u> </u>								U. S. PATE	NT DOCUMENTS			AUN	
REMINAZE	00	XVI T	HEY	ส ห	iou.	BER	•	DATE		NULE .	CLASS	WECKH!	Y APP	
<u></u>	6	3	5	8	7	5	7	3/19/02			438	3	4/3/0	
	6	4		3	7	8	8				438	. 3		
C/Si	6			1		6	ļ	7/9/02	Tuttle	,	25		7/27	
D E				-										-
Einfeit	IEI					1								
Ein	1										-			
	-			_			_							
	-			-										_
				_									-	
		-		ļ. <u> </u>	_						-			
				_								·		
							-		FOREIGN PA	TENT DOCUMENTS	5		Trans	_
	OOCUMENT NUMBER					REA		OATE	cou	COUNTRY		subcuss)	YES	
						-								-
											۰.			
								.,					·	
													·	
						ļ								
	1				L				OTHER DOC	UMENTS (Induana Au	rusor, True	, Dale, Pertinent	Pagos, E	IC.
		()	. <	3.	(24	-			Publication				_
		1								c Memory	•			
}	+	1	<u>0</u>	`		<u>~ (</u>		one ;	Magnett	c memory	1 ·	1,	<u>, w, ,</u>	=
			1		<u>t</u>	11	C	event	Disrupti	ons to Magne	et 12	alion 11	n De	<u>~</u>
}	-	1	-0	لم	2	۲,		Pub C	ate 5/9	102, US Cla	55 '	t38/3.		
						··					· · · · · · · · · · · · · · · · · · ·			
									·					
CY WHICH										0177 001407070				
EXAMMER										DATE CONMOERED				

citation if not in conformance and not considered. Include copy of this form with next communication to the applicant